R. LAVIN & SONS, INC.
(a.k.a. North Chicago Refiners & Smelters)
North Chicago, Lake County, Illinois 60064
CERCLIS ID# ; SITE SPILL #

IL, 10th Congressional District
Mark Steven Kirk (R)
http://www.house.gov/kirk/

RPM:

John J. O'Grady
Telephone: 312.886.1477
Facsimile: 312.886.4071
E-mail: Ogrady.Johnj@epa.gov

DESCRIPTION:

- Surface run-off flowed into one of two interconnected surface impoundments (SE & SW impoundments) on south end of operations area located NE of south warehouse.
- Water discharged into storm sewer tributary of Pettibone Creek.
- Slag piles noted on site in past.
- Former settling pond, North impoundment, is located on NW side of property, north of large on-site building and west of water tanks.
- According to Illinois EPA reports, R. Lavin has installed eleven onsite monitoring wells.
  - Site has 8 shallow wells and 3 deep monitoring wells.
- Site regulated by RCRA in regards to fill material covering site.
- Water was pumped from SW impoundment to North impoundment.
- SW impoundment had no liner or leachate collection system.
- Virtually entire parking lot of facility is paved in asphalt and considered by Illinois EPA to be RCRA-compliant hazardous waste cap.
- According to Illinois EPA documents this facility violated its NPDES permit limits.
  - Maybe due to site runoff and/or contaminated groundwater.
  - Contaminated groundwater maybe infiltrating on-site stormwater ditch.
  - Ditch discharges to stormwater outfall that discharges to Pettibone Creek.
  - R. Lavin is major contributor to contaminated sediments to creek per Illinois EPA.

BACKGROUND:

- **1941:** North Chicago Refiners and Smelters (NCRS) site was leased by R. Lavin & Sons.
  - Operated smelting/refining business of non-ferrous scrap metals and manufactured bronze and brass ingots.
- **1973:** NCRS received operating permits for air emission control equipment from IEPA.
- **1990:** Consent Order issued included groundwater monitoring and paving most of site.
- **1990:** NPDES permit expired (allowed discharge from two outlets into Pettibone Creek).
- **1991:** Screening Site Inspection indicated Cd, Ca, Chr, Cu, Pb, Mg, Ni, Ag, and Zn at

concentrations at least 3 times above background in SW surface impoundments.

- **1991:** Sediment samples analyzed from SW impoundment indicated 2-methylnaphthalene, Be, Ca, Chr, Cu, Pb, Ni, Ag, and Zn at levels at or above 3 times background.
- **1991:** North impoundment previously used as a settling pond for wastewater (no liner or groundwater monitoring) was backfilled and paved.
- **1991:** Backfilled north impoundment sampled and PCBs, Ba, Cd, Ca, Chr, Cu, Pb, Mg, Ni, Ag, and Zn found in excess of three times background levels.
- **1991 to 1992:** Based on a cursory review of lead contamination only, analytical results indicate that groundwater is heavily contaminated with Lead.
  - **11/1991:** sampling event lead levels in groundwater range 17.8 parts per billion (ppb) to 8,920J ppb (600 times MCL).
  - **01/1992:** sampling event lead levels in groundwater range from 72.7J ppb to 20,100J ppb (1250 times the MCL).
- **1994:** SW impoundment dredged and lined. Dredged sediments put in furnace.
- **1994:** Analysis of background and residential samples N/NW of NCRS Site showed di-n-butyl phthalate, pyrene, bis(2-eth_ iexyl) phthalate, benzo(b)fluoranthene, Cd, Chr, Cu, Pb, Ag, Zn, and CN in excess of t ree times of background results.
- Sediment samples collected along Pettibone Creek during Extended Site Investigation showed Cd, Chr, Cu, Pb, Ni, and Zn in the sample downstream of the NCRS outfall.
- **2002:** Rough estimate of potential costs for R. Lavin (Table G-7, "Superfunds Future" published in 2001 by RFF Press, Katherine N. Probst and David M. Konisky).

	Ave. Extramural Costs	Ave. Intramural Costs
• **RI/FS**	$1,040,000	$ 57,000
• **RD**	$1,198,000	$ 27,000
• **RA (includes O&M)**	$4,418,000	$ 43,000
Subtotal	$6,656,000	$127,000
Total Average Costs =	**$6,783,000**	

ACTIONS NEEDED/ANTICIPATED:

- Facility warrants further investigation because lead levels greatly exceed MCL of 15 ppb.
- Additional groundwater and Pettibone Creek investigation necessary due to NPDES violations and contaminated sediments in Pettibone Creek.
- RI necessary to determine extent of groundwater contamination including offsite areas, identification of contaminant pathways, identification of current and future contaminant receptors and current and potential risks to those receptors.